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ELECTRONIC

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte LYMAN J. PETROSKY

Appeal 2019-004694 Application 14/936,751 Technology Center 1700

Before JEFFREY R. SNAY, LILAN REN, and MICHAEL G. McMANUS, *Administrative Patent Judges*.

McMANUS, Administrative Patent Judge.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ seeks review of the Examiner's decision to reject claims 1–11. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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¹ We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Westinghouse Electric Company LLC. Appeal Brief dated Feb. 4, 2019 ("Appeal Br.") 1.

CLAIMED SUBJECT MATTER

The present application generally relates to a modular electrochemical machining apparatus. Specification filed Nov. 10, 2015 ("Spec.") ¶ 1. An electrochemical machining apparatus (ECM) "involves the application of a potential difference between a metallic workpiece and an electrode plus the application of an electrolyte between the workpiece and the electrode" and thereby removes unwanted material from the workpiece. Spec. ¶ 4. Conventional ECM apparatus are limited "because of the large number of components that must cooperate with one another, the weight and size of such components, and the complexity of their interconnections." *Id*.

The Specification describes an apparatus where the "components are modular and are mounted on separate supports." Id. ¶ 5. The modular components can be individually moved to a location within a facility where a component is installed, and the modules can be interconnected to form the modular electrochemical machining apparatus at the location of the installed component. Id.

Claim 1 is illustrative of the subject matter on appeal and is reproduced below with certain limitations bolded for emphasis:

1. A modular electrochemical machining apparatus structured to be moved to a location within a facility where a component is installed and to perform an electrochemical machining operation on the component, the modular electrochemical machining apparatus comprising:

a power module comprising a power supply and **a first support**, the power supply being situated on the first support;

an electrolyte apparatus comprising an electrolyte processing module, the electrolyte processing module comprising a fluid circulation system structured to carry and

circulate a quantity of electrolyte material and a second support, at least a portion of the fluid circulation system being situated on the **second support**, **the second support being separate from the first support**;

a drive apparatus comprising an actuator module, the actuator module comprising an actuator and a **third support**, **the third support being separate from the first support and the second support** and being structured to be affixed to at least one of the component and another structure of the facility that is situated in proximity to the component, the actuator comprising a movable portion that is movable with respect to the third support between a first position with respect to the component and a second position with respect to the component as a part of the electrochemical machining operation;

a control apparatus in operative communication with the actuator; and

a connection apparatus structured to connect together the power module, the electrolyte apparatus, and the drive apparatus.

Appeal Brief dated Feb. 4, 2019 ("Appeal Br.") 9 (Claims App.) (reformatted for clarity).

REFERENCES

The Examiner relies upon the following prior art:

Name	Reference	Date
Williams	US 3,444,070	May 13, 1969
Asaoka	US 4,863,579	Sept. 5, 1989
Edwards	US 5,820,744	Oct. 13, 1998
Obara ²	JP 2007-21632 A	Feb. 1, 2007

² The Examiner relies, in part, on the English language abstract of Obara.

REJECTIONS

The Examiner maintains the following rejections:

- 1. Claims 1–8, 10, and 11 are rejected under 35 U.S.C. § 103 as being unpatentable over Edwards in view of Obara. Final Action dated Sept. 4, 2018 ("Final Act.") 3–8.
- 2. Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over Edwards in view of Obara and further in view of Williams. *Id.* at 8.
- 3. Claim 9 is rejected under 35 U.S.C. § 103 as being unpatentable over Edwards in view of Obara and further in view of Asaoka. *Id.* at 9–10.

DISCUSSION

Rejection 1. The Examiner rejects claims 1–8, 10, and 11 as obvious over Edwards in view of Obara. *Id.* at 3–8.

The Examiner finds that Edwards teaches an electrochemical machining apparatus. *Id.* at 3. The Examiner finds, however, that "Edwards does not disclose the separate supports[,] which the power supply, fluid circulation and actuator module are situated on." *Id.* at 4. The Examiner further finds that the secondary reference, Obara, teaches an electrochemical machining apparatus that includes "a base (12 = support) on a floor and a support part (14) set up vertically on the base (12)." *Id.* at 5. Figure 1 of Obara is reproduced below.

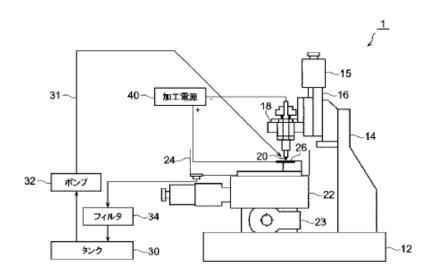


Figure 1 depicts the electrochemical machining apparatus of Obara.

The Examiner finds that "[t]he supports (e.g. base, part, table, etc.) of Obara are separate elements (i.e. they are distinct or different) and situated in proximity with the workpiece component." *Id.*; *see also* Examiner's Answer dated April 18, 2019 ("Answer") 14 (annotated Figure 1 of Obara). The Examiner determines that "[t]he claimed 'support' is not particularly limiting" and "[a]ny support feature reads on the instant support." Final Act. 5. The Examiner additionally determines that "the mere duplication of individual supports would have been an obvious engineering design choice." *Id.* at 6.

Appellant argues that the rejection is in error. Appeal Br. 3–7. First, Appellant contends that neither Edwards nor Obara teaches the three separate supports required by claim 1. *Id.* at 4–5. We need not address Appellant's argument regarding Edwards as the Examiner did not rely on Edwards as teaching the claimed supports. Final Act. 4. In regard to Obara, Appellant argues that "the supporting part (14) is indisputably situated on

the base (12). As such there can be no question *whatsoever* that the base (12) and the alleged support part (14) are <u>not</u> separate from one another." Appeal Br. 4 (emphases in original).

Appellant's argument implicates the claim construction of the term "separate" as used in claim 1. In the Final Action, the Examiner determines that "the term separate may be defined as individual or distinct." Final Act. 12. Appellant argues that the Examiner's proposed construction of the term "separate . . . <u>improperly renders meaningless</u> the various recitations in Claim 1 of the first, second, and third supports being separate from one another." Appeal Br. 4–5 (emphasis in original).

During examination, claims are given their broadest reasonable interpretation consistent with the specification. *See In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). "Construing claims broadly during prosecution is not unfair to the applicant . . . because the applicant has the opportunity to amend the claims to obtain more precise claim coverage." *Id.* Here, the Examiner has put forward a reasonable proposed definition of "separate." Appellant indicates its view that such proposed definition would "render[] meaningless" the "support" limitations. Appellant additionally indicates its view that structures that are "physically affixed to one another" should not be seen as separate. Reply Brief dated May 24, 2019 ("Reply Br.") 2. Appellant, however, does not offer a definition of its own nor direct us to any portion of the Specification inconsistent with the Examiner's proposed definition. Given the preceding, we adopt the Examiner's proposed definition of "separate" to mean "individual or distinct."

In view of the foregoing, Appellant has not shown error in the Examiner's finding that Obara teaches separate supports.

Appellant additionally includes some discussion of the term "modular" which is found in the preamble of claim 1. Appeal Br. 3–4; Reply Br. 2–3.

"[A]s a general rule preamble language is not treated as limiting," Aspex Eyewear, Inc. v. Marchon Eyewear, Inc., 672 F.3d 1335, 1347 (Fed. Cir. 2012), but "[w]hether to treat a preamble as a limitation is determined on the facts of each case in light of the overall form of the claim[] and the invention as described in the specification and illuminated in the prosecution history," Deere & Co. v. Bush Hog, LLC, 703 F.3d 1349, 1357 (Fed. Cir. 2012) (internal quotations omitted). "In general, a preamble limits the invention if it recites essential structure or steps, or if it is necessary to give life, meaning, and vitality to the claim." Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002) (quotation marks omitted). Further, the Federal Circuit has "long ruled that a preamble is not limiting where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention." Arctic Cat Inc. v. GEP Power Prods., 919 F.3d 1320, 1328 (Fed. Cir. 2019) (internal quotations omitted); see Georgetown Rail Equip. Co. v. Holland L.P., 867 F.3d 1229, 1236 (Fed. Cir. 2017).

Here, the preamble provides, in part, for "[a] **modular** electrochemical machining apparatus structured to be moved to a location within a facility." Appeal Br. 9 (Claims App.) (emphasis added). The preamble does not recite any essential structure or steps. Nor does it impart "life, meaning,

and vitality to the claim." Accordingly, the broadest reasonable interpretation of the preamble is that it is not limiting.

Appellant additionally argues that the Examiner errs in determining that one of ordinary skill in the art would have had reason to combine the teachings of Edwards and Obara. Appeal Br. 5–6.

In the Answer, the Examiner describes the basis for combination as follows:

[O]ne of ordinary skill in the art would also look to the art for workable supports for supporting such elements in order to produce an apparatus including additional details regarding a support such as sizing, material, and/or orientation. Looking to the relevant art in the field of ECM devices would provide guidance for one of ordinary skill in the art in regards to the appropriate support for the elements of an ECM device. Obara explicitly discloses the physical characteristics of supports that one would utilize for the apparatus of Edwards.

Answer 14–15.

In its principal brief, Appellant argues that, given the Examiner's finding that one of skill in the art would recognize the need for a support rather than having structures "suspended freely in air" (Final Act. 6), "[t]here would therefore be no reason to consult Obara to avoid such free-floating in the air of a power supply. There is therefore no motivation to consult Obara or to combine reference teachings" (Appeal Br. 5).

"The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). Here, the Examiner proposes that one of skill in the art would have had looked to similar known devices for suitable supports. Appellant has not shown that such

combination would have been more than the combination of familiar elements according to known methods. Accordingly, Appellant has not shown error in this regard.

In the Reply Brief, Appellant seeks to introduce a new argument regarding the limitation requiring that the third support is "structured to be affixed to at least one of the component and another structure of the facility." Reply Br. 2. Appellant has not sought to show that this is responsive to a determination in the Answer nor to show good cause for the new argument. Accordingly, it will not be considered. *See* 37 C.F.R. § 41.41(b)(2).

In view of the foregoing, Appellant has not shown error in the rejection of claim 1. Appellant relies on the same arguments presented with regard to claim 1 in support of its appeal of the rejection of claims 2–8, 10, and 11. Appeal Br. 6–7. As we have not found such arguments to be persuasive, we determine that Appellant has not shown error in the Examiner's rejection of claims 2–8, 10, and 11.

Rejections 2 and 3. The Examiner rejects claim 3 as obvious over Edwards in view of Obara and further in view of Williams. Final Act. 8. The Examiner further rejects claim 9 as obvious over Edwards in view of Obara and further in view of Asaoka. *Id.* at 9–10. Appellant relies on the same arguments presented with regard to claim 1 in support of its appeal of the rejection of claims 3 and 9. Appeal Br. 7–8. As we have not found such arguments to be persuasive, we determine that Appellant has not shown error in the Examiner's rejection of claims 3 and 9.

CONCLUSION

The Examiner's rejections are affirmed.

In summary:

Claims	35 U.S.C.	Reference(s)/Basis	Affirmed	Reversed
Rejected	§			
1–8, 10, 11	103	Edwards, Obara	1–8, 10, 11	
3	103	Edwards, Obara,	3	
		Williams		
9	103	Edwards, Obara,	9	
		Asaoka		
Overall			1-11	
Outcome				

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

<u>AFFIRMED</u>